

REMARKS

Claims 23, 25-26, and 28-29 are currently pending. Claims 1-22 and 30-37, withdrawn pursuant to a restriction requirement, are canceled, without prejudice to the prosecution of their subject matter in other patent applications. Claims 23, 26, and 29 have been amended. The amendments to claims 23, 26, and 29 do not constitute new matter. The limitations of claims 24 and 27 have been incorporated into claims 23 and 26, and accordingly claims 24 and 27 have been canceled.

The specification has been amended to delete various sequence information found on pages 18-22. New Figures 2 through 4 have been added comprising the deleted sequence information, and descriptions of the new figures have been added at page 3. Support for these amendments can be found in the original specification at pages 18-22.

The Examiner has objected to the information disclosure statement filed on August 20, 2003. The Examiner objects to the specification due to the inclusion of an imbedded hyperlink, the asserted mislabeling of Figure 1, and the inclusion of text which the Examiner asserts does not comply with proper formatting requirements.

The Examiner has rejected claims 23, 25, 27, and 29 under 35 U.S.C. § 112, first paragraph, for lack of enablement. The Examiner has rejected claims 23, 24, 26, 27, and 29 under 35 U.S.C. § 112, first paragraph, for lacking support in the written description. The Examiner has rejected claims 23-29 under the judicially created doctrine of obviousness-type double patenting over claim 1 of U.S. patent No. 6,780,601. For the reasons detailed below, the rejections should be withdrawn and the claims allowed to issue. Entry of the foregoing amendments is respectfully requested.

Objection to the Information Disclosure Statement

The Examiner has objected to the information disclosure statement filed on August 20, 2003. The Examiner asserts that the information disclosure statement fails to comply with 37 C.F.R. § 1.98(a)(2), because legible copies of each foreign patent and non-patent literature publication was not provided. Applicants note that the references identified in the information disclosure statement were submitted in U.S. Patent Application Serial No. 09/969,844, now U.S. Patent No. 6,780,601, to which the present application claims priority. Therefore, it is not required for the references to be resubmitted in the present application, pursuant to C.F.R. § 1.98(d)(2). Accordingly, Applicants respectfully request that the references cited in the information disclosure statement submitted on August 20, 2003 be considered and made of record in the present application.

Objections To The Specification

The Examiner objects to the specification due to the inclusion of an imbedded hyperlink, due to the asserted mislabeling of Figure 1, and to the inclusion of sequence data which the Examiner asserts does not comply with proper formatting requirements.

The Examiner has required deletion of the embedded hyperlink, citing MPEP § 608.01(p). Applicants disagree and note that the hyperlink cited on page 5, line 10 is not intended to be incorporated by reference, and the contents of the site to which the hyperlink is directed is not intended to be incorporated into the specification. See MPEP § 608 (“Where the hyperlinks and/or other forms of browser-executable codes themselves rather than the contents of the site to which the hyperlinks are directed are part of applicant’s invention... and applicant does not intend to have these hyperlinks be active links, examiners should not object to these

hyperlinks.”). As such, Applicants request that the embedded hyperlinks be disabled, and that the objection be withdrawn.

The Examiner has objected to the labeling of Figure 1, as well as the sequence information presented on pages 18-20 and 22-24. Applicants note that the sequences presented on pages 18-20 and 22-24 have been deleted from the specification, and that three new figures have been introduced which contain the sequence information. The new figures have been labeled Figures 2 through 4, and descriptions of the new figures have been introduced at page 3. Applicants submit that these amendments obviate the Examiner’s rejections to Figure 1 and the sequence data, and respectfully request withdrawal of the objections.

The Claims Are Enabled

The Examiner has rejected claims 23, 25, 27, and 29 under 35 U.S.C. § 112, first paragraph, for lack of enablement. The Examiner states that

“Whereas one could produce a purified glutamate chloride channel subunit of the instant invention and employ it in [] an assay, that assay would be inoperative.... The amino acid sequence presented in SEQ ID NO:14 of the instant application does not correspond to a glutamate-gated chloride channel.”

The Examiner asserts that because SEQ ID NO:14 encodes a subunit of the glutamate-gated chloride channel, and not the entire channel, formation of the glutamate-gated chloride channels outside of a cell or membrane.

Applicants note that claim 23 has been amended to incorporate the limitations of claim 24, and now recite that “the chloride channel is in a host cell, a membrane preparation or an oocyte.” The limitations of claim 27 have been incorporated into claim 26, and claim 27 has been canceled. Thus, claims 23, 25, and 29 no longer encompass glutamate-gated chloride

channels outside of a cell membrane. Accordingly, Applicants submit that the Examiner's rejection has been obviated, and respectfully request that the rejection be withdrawn.

The Claims Are Supported By The Specification

The Examiner has rejected claims 23, 24, 26, 27, and 29 under 35 U.S.C. § 112, first paragraph, for lacking support in the written description. The Examiner asserts that the lepidopteran glutamate-gated sodium channels disclosed in the present specification do not support the entire genus of lepidopteran glutamate-gated sodium channels.

Applicants note that claim 23 has been amended to recite "wherein said lepidopteran glutamate-gated chloride channel is at least 90% homologous to the sequence encoded by nucleotides 144 through 1484 of SEQ ID NO:13." This amendment is supported by the specification at page 4, line 14 to page 5, line 12. Applicants submit that based upon this amendment, the invention as claimed now identifies a specific structural property of the claimed chloride channels, *i.e.*, at least 90% homology to the specified sequence. Based upon the specification, a person of ordinary skill in the art would be capable of identifying other chloride channels with the requisite level of homology without undue experimentation. *Id.* Accordingly, Applicants submit that the claims, as amended, are fully supported by the specification.

Based upon the foregoing, Applicants submit that the rejection for lack of written description has been obviated, and respectfully request its withdrawal.

Double Patenting

The Examiner has rejected claims 23-29 under the judicially created doctrine of obviousness-type double patenting over claim 1 of U.S. Patent No. 6,780,601 ("the '601

patent"). Applicants file herewith a terminal disclaimer in compliance with 37 C.F.R. 1.321(c) to overcome the rejections based on the judicially created doctrine of double patenting, to disclaim the terminal part of the statutory term of any patent granted on the above-identified application, which would extend beyond the expiration date of the '601 patent.

Therefore, in view of the foregoing, reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

Entry of the foregoing amendments and remarks into the file of the above-identified application is respectfully requested. The Applicant believes that the inventions described and defined by claims 23, 25-26, and 28-29 are patentable over the rejections of the Examiner. Withdrawal of all rejections and reconsideration of the amended claims is requested. An early allowance is earnestly sought.

Respectfully submitted,


Lisa B. Kole

Patent Office Reg. No. 35,225

Van H. Nguyen
Patent Office Reg. No. 56,571

Attorneys for Applicants
BAKER BOTTS L.L.P.
30 Rockefeller Plaza
New York, NY 10112--4498
(212) 408-2500